

### CTE Standards Unpacking Community and Regional Planning

**Course:** Community and Regional Planning

**Course Description:** Community and Regional Planning introduces students to the knowledge and skills of using the techniques and political process of designing and shaping counties and cities. Students will develop an understanding of the historical rationale for urban planning, gain knowledge about contemporary planning practice and current issues faced by planners. Students will also engage firsthand with urban planning issues and phenomena in relation to their local context.

Career Cluster: Government and Public Administration

**Prerequisites:** Geography

**Program of Study Application:** Community and Regional Planning is the first pathway course in the Government and Public Administration cluster, Community Planning pathway.

**INDICATOR #CRP 1:** Learners will develop an understanding of the history of urban planning.

**SUB-INDICATOR 1.1 (Webb Level: 1 Recall):** Identify contributions of civilizations to modern urban planning

**SUB-INDICATOR 1.2 (Webb Level: 1 Recall):** Name key inventors and contributors to modern urban planning

#### **Knowledge (Factual):**

- -Key civilization contributions
  - -street systems

(rectilinear and radial)

- -division of cities into specialized quadrants
- -central command structures
- -fortification
- -water supply
- -drainage
- -Etc.
- -Key European Planners
  - -Raymond Unwin
  - -Tony Garnier
  - -Ernst May
  - -Etc.

#### **Understand (Conceptual):**

- -The impact of changes that occurred in urban planning
- -The influence of prominent planners throughout history
- -New ways of urban planning have attempted to remedy early urban problems

### Do (Application):

- -Choose a time period in history and create a physical (or electronic) map of an advancement in urban mapping
- -Participate in a key inventor and contributor fair highlighting key facts of both historical and modern planners
- -Identify examples of prominent planners through the use of online map tools
- -Compare and contrast the contributions and philosophies of European and American planners



-Key American Planners
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- -Frank Lloyd Wright
- -Frederick L. Olmsted
- -Robert Moses
- -Etc.

#### **Benchmarks:**

Students will be assessed on their ability to:

- Select a neighborhood and conduct research of how that neighborhood looked fifty years ago. Using that research produce an artifact that illustrates the changes.
- Create a model of a city from an earlier civilization. For example, create a model of a city based on ancient Maya, medieval or Renaissance Europe, or preindustrial China urban planning design. Allow students to select time period and civilization for their design.

#### **Academic Connections**

# ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):

#### **Socials Studies:**

K-12.G.1 Students will apply geospatial resources, including data sources and geographic tools to generate, interpret, and analyze information.

K-12.G.5 Students will recognize and explain the role population and culture play in creating diversity within the world's places and regions.

K-12.G.6 Students will understand the ways in which humans culturally adapt to, use, and modify the natural environment and its various elements.

#### ELA:

9-10.W.4 Produce clear and coherent writing in which the development, organization, style, and tone are appropriate to task, purpose, and audience.

## Sample Performance Task Aligned to the Academic Standard(s):

-Write a research paper about the history of urban planning and its impact on the development of cities and communities. (K-12.G.1, K-12.G.5, K-12.G.6, 9-10.W.4)



#### INDICATOR #CRP 2: Learners will explore planning theories

SUB-INDICATOR 2.1 (Webb Level: 1 Recall): Identify planning theories

**SUB-INDICATOR 2.2 (Webb Level: 4 Extended Thinking):** Synthesize theories to develop your own urban plan

develop your own urban plan							
Knowledge (Factual):	Understand (Conceptual):	Do (Application):					
- Concentric zone model	-The impact planning	-Create your own urban					
	theories have on city design	plan of a city or fictitious					
- Grid model		place					
	-The impact planning						
- Public choice theory	theories have on	-Critique local and					
	demographics	regional urban plans					
- Central Place theory		based on their					
	-The impact planning	application of planning					
- Sector model	theories have on function	theories					
- Multiple Nuclei Model	-How different regions and	-Simulate urban planning					
•	localities require	designs through					
	application of different	technology-based and in-					
	planning theories	room applications					
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#### **Benchmarks:**

Students will be assessed on their ability to:

- Plan a city using different theories for different areas of neighborhoods.
- Take an existing city and apply the concepts of a specific theory to plan an expansion.

#### **Academic Connections**

# ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):

#### **Social Studies:**

K-12.C.5 Students will understand the ways in which a citizen can use their basic rights to influence the decisions of the republic.

K-12.G.7 Students will apply geographic knowledge to understand the diversity of Earth's physical and human conditions, past, present, and future.

# Sample Performance Task Aligned to the Academic Standard(s):

-Research and present an advertisement (e.g. poster, pamphlet, television commercial) that attempts to persuade local residents (allowing for diversity) to adopt a specific urban planning model. (K-12.C.5, K-12.G.7, PK-12.OSEU.1.3, 9-10.W.9)



ELA:

9-10.W.9 Draw relevant evidence from literary or informational texts to support analysis, reflection, and research.

## INDICATOR #CRP 3: Learners will understand the components of urban planning

**SUB-INDICATOR 3.1 (Webb Level: 1 Recall):** Define and explain the sub-disciplines of urban planning

**SUB-INDICATOR 3.2 (Webb Level: 2 Skill/Concept):** Compare the interrelationships among sub-disciplines

**SUB-INDICATOR 3.3 (Webb Level: 1 Recall):** Identify techniques used in urban planning

planning		
Rnowledge (Factual): -Design of Urban environment, infrastructure, and transportation  -Sub-disciplines: land- use planning, zoning, economic development, environmental planning, and infrastructure planning, etc.	Understand (Conceptual): -Predicting population growth, zoning, geographic mapping and analysis,  -The importance of park space  -The role the water supply  -Transportation patterns  -Recognizing food supply demands  -Allocating services (e.g. healthcare, social services, etc.)	Do (Application): -Compile a list of zoning requirements in a city and reflect on their impact of urban planning design  -Interview a city planner or member of city government about how urban planning impacts their role  -Identify the components of a urban planning in an existing communities strategic plan  -Debate the various techniques of urban planning

#### **Benchmarks:**

Students will be assessed on their ability to:

 Synthesize urban planning logistics (infrastructure, housing etc.) along with water & food supplies, green space (parks) by creating a model combining these.



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K-12.G.1 Students will apply geospatial resources, including data sources and geographic tools to generate, interpret, and analyze information.

K-12.G.5 Students will recognize and explain the role population and culture play in creating diversity within the world's places and regions.

K-12.G.6 Students will understand the ways in which humans culturally adapt to, use, and modify the natural environment and its various elements.

## Sample Performance Task Aligned to the Academic Standard(s):

-Conduct an internship with a city or regional planner. Recommended topics to focus on include social services, cultural needs, and infrastructure. (K-12.G.1, K-12.G.5, K-12.G.6)

## INDICATOR #CRP 4: Learners will learn and practice the uses of Geographic Information Systems (GIS)

**SUB-INDICATOR 4.1 (Webb Level: 1 Recall):** Define GIS and list its capabilities **SUB-INDICATOR 4.2 (Webb Level: 1 Recall):** Explain the uses GIS

SUB-INDICATOR 4.3 (Webb Level: 4 Extended Thinking): Demonstrate uses of GIS

- Origins of GIS

urban planning

GIS

### Knowledge (Factual): Und

- -Geographic Information Systems (GIS)
- -Capabilities of GIS
  -Use geographic data
  elements to represent
  any geographic entity
  -Georeferencing
- -Diverse applications of GIS

-Etc.

### Understand (Conceptual):

- Importance & benefits of
- -GIS has various practical and research applications in

### Do (Application):

- -Use GIS software to model several different outcomes for a specific area of possible growth
- -Formulate plans to prepare regions for natural/manmade calamities based on GIS models



#### **Benchmarks:**

Students will be assessed on their ability to:

- Choose an urban area and use GIS to model different possible growth outcomes while comparing and contrasting the benefits of different approaches to laying out infrastructure
- Use a classmate's GIS urban plan and try to improve their layout in respect to transportation, environmental impact, energy use, fire/police response etc.

#### **Academic Connections**

# ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):

#### **Social Studies:**

9-12.G.6.3 Explain the ways technology expands the human capacity to use and modify the physical environment

9-12.G.7.1 Analyze key processes that have resulted in changes within Earth's physical and human systems

#### Science:

HS-ESS3-3 Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.

HS-ESS3-6 Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.

## Sample Performance Task Aligned to the Academic Standard(s):

-Students will create multiple alternative forecast models for population growth in a specified urban area using GIS models while analyzing the benefits and drawbacks of the changes they make. (9-12.G.6.3, 9-12.G.7.1, HS-ESS3-3, HS-ESS3-6)

-Using GIS software models, students will create solutions to urban flooding issues such as Hurricane Harvey (Houston, 2017). (9-12.G.6.3, 9-12.G.7.1, HS-ESS3-3, HS-ESS3-6)

#### Additional Resources

Please list any resources (e.g., websites, teaching guides, etc.) that would help teachers as they plan to teach these new standards.

- Inclusive and Sustainable Urban Planning: A Guide for Municipalities -UNHabitat
- GIS Lounge Resources for Geographic Information System



- Guides to resources prepared by the Environmental Design Library at the University of California, Berkeley.
- <u>Dakota Resources</u> (Nonprofit Economic Development in SD)
- SD Office of Economic Development